WHAT IS CLAIMED IS:

1. A database management system connected to a plurality of storages for storing a plurality of data items, comprising:

a storage having a first storage area corresponding to a plurality of storages for storing a plurality of data items and having a second storage area corresponding to a storage to be added to or disconnected from said plurality of storages;

an acceptance section connected to the storage for accepting a data processing request, said data processing request including data processing in said plurality of storages and data rebalance between said plurality of storages; and

a plurality of executors connected to said acceptance section for sequentially executing at least any of the data processing in the plurality of storages and the data rebalance.

2. A database management system as set forth in claim 1, wherein said storage has a storage area correspondence table showing combinations of predetermined data items to be sharedly shared by said plurality of storages according to said request of addition or disconnection to cause the data rebalance between the storages.

3. A database management system as set forth in claim 1, wherein said acceptance section has a rebalance flag indicating that said plurality of

storages are being rebalanced due to addition or disconnection to said plurality of storages, and said acceptance section, in response to a data processing request to said data items stored in said plurality of storages, refers to said rebalance flag and reflects data update even on the storages subjected to the data rebalance.

4. A database management system as set forth in claim 3, further comprising mean, in response to a rebalance request of data to be rebalanced in a storage added according to said addition request, for adding data position information to data before subjected to the rebalance execution by said data rebalance request in said plurality of storages, and means for deleting the data added with the data position information and before subjected to execution of the rebalance execution after the execution of the rebalance execution by the rebalance request.

5. A database management system as set forth in claim 1, further comprising means, in response to a rebalance request of data to be rebalanced in a storage added according to said addition request, for adding data position information to data before subjected to the rebalance execution by said data rebalance request in said plurality of storages, and means, in response to said data processing request of update or delete to data in said plurality of storages, for deleting data corresponding to the data to be updated or deleted but

added with said data position information after the rebalance execution.

6. A database management program installed in a database management system connected a plurality of storages for storing a plurality of data items via an interface, said program being capable of being read by a computer, said program comprising the steps of:

setting first information indicative of a plurality of storages for storing the plurality of data items in a first storage area;

setting second information indicative of a storage to be subjected to a request of add or disconnect to said plurality of storages in a second storage area;

accepting a database processing request at an acceptance section connected to said storages, sad database processing request including processing of data in the plurality of storages and data rebalance between said plurality of storages; and

sequentially executing at least any of the data processing in the plurality of storages and the data rebalance in a plurality of executors.

7. A database management program as set forth in claim 6, further comprising a step of storing in said storages a storage area correspondence table showing combinations of predetermined data items to be sharedly stored by said plurality of storages in response to said request of addition or disconnection to cause data

rebalance between the storages.

8. A database management program as set forth in claim 6, further comprising a step of setting rebalance information indicating that said plurality of storages being rebalanced due to addition or disconnection to the plurality of storages in a rebalance flag, and a step of, in response to a data processing request to said data items stored in said plurality of storages, referring to said rebalance flag and reflecting data update even on the storages subjected to the data rebalance.

9. A database management program as set forth in claim 8, further comprising a step of, in response to a rebalance request of data to be rebalanced in a storage added according to said addition request, adding data position information to data before subjected to the rebalance execution by said data rebalance request in said plurality of storages, and a step of deleting the data added with the data position information and before subjected to execution of the rebalance execution after the execution of the rebalance execution by the rebalance request.

10. A database management program as set forth in claim 6, further comprising a step of, in response to a rebalance request of data to be rebalanced in a storage added according to said addition request, adding data position information to data before subjected to the rebalance execution by said data rebalance request in

said plurality of storages, and a step of, in response to said data processing request of update or delete to data in said plurality of storages, deleting data corresponding to the data to be updated or deleted but added with said data position information after the rebalance execution.

11. A database system connected to a plurality of storages for storing a table of data having a plurality of data items, said table data being determined according to a predetermined division rule and stored in the storages, said system comprising:

rebalance operation means for determining data to be moved between the storages due to any one of addition and disconnection of a storage to be connected according to said division rule and moving the determined data;

means for accepting a search request, update request, delete request or insert request to said table data during execution of the rebalance operation of the rebalance operation means;

means, in response to the accepted search, update or delete request, for performing search, update or delete operation over said storages; and

means, in response to the accepted insert request, for determining a storage destination of data to be inserted from said storage according to said division rule and inserting the data to be inserted in the determined storage.

12. A database system as set forth in claim 11, further comprising means, in response to said accepted search, update and delete requests, for parallelly executing search, update and delete operations over existing storages, and after completion of the parallel execution of the existing storages, for parallelly executing search, update and delete operations over an additional storage.

13. A database system as set forth in claim 12, further comprising means, in response to the accepted insert request, for determining a storage destination of data to be inserted from said additional storage according to said division rule and for inserting the insert object data in the determined storage.

14. A database system connected to a plurality of storages for storing a table of data having a plurality of data items, said table data being determined according to a predetermined division rule and stored in the storages, said system comprising:

rebalance operation means for determining data to be moved from existing storages to an additional storage according to said division rule, copying the determined data from said existing storages to said additional storage, previously adding copy position information in the additional storage to copy source data in the existing storages, and after completing the copy operation of all the data determined to be moved to said additional storage,

deleting all the copy source data in said existing storages;

means for accepting search, update, delete and insert requests for said table data during execution of rebalance operation of said rebalance operation means;

means, in response to the accepted search request, for performing search operation over data stored in said existing storages;

means, in response to the accepted update and delete requests, for performing update and delete operations over the data stored in said existing storages, and, when said copy position information is added to data to be updated and deleted, for performing update and delete operations even over data as a copy destination in said additional storage; and

means, in response to the accepted insert request, for storing data to be inserted in one of said existing storages determined according to said division rule before addition thereof in said additional storage, and when said additional storage is a storage destination of said insert object data according to said division rule after addition of said additional storage, for storing said insert object data in said additional storage, and adding storage position information of said insert object data in said additional storage to the insert object data in said existing storages.

15. A database management method for a database system connected to a plurality of storages for storing a table of data having a plurality of data items, said table data being determined according to a predetermined division rule and stored in the storages, said method comprising the steps of:

determining data to be moved between the storages according to said division rule due to any one of addition and disconnection of a storage to be connected and moving the determined data for rebalance operation;

accepting search, update, delete and insert requests to said table data during execution of said rebalance operation in said rebalance operation step;

in response to the accepted search, update and delete requests, executing search, update and delete operations for said storages; and

in response to the accepted insert request, determining a storage destination of data to be inserted from said storages according to said division rule.

16. A database management method as set forth in claim 15, further comprising a step of, in response to said accepted search, update and delete requests, parallelly executing search, update and delete operations over the existing storages and, after completing the parallel operation, parallelly executing the search, update and delete operations over said

additional storage.

17. A database management method as set forth in claim 16, further comprising a step of, in response to the accepted insert request, determining a storage destination of the data to be inserted from said existing and additional storages according to said division rule and inserting said insert object data in the determined storage.

18. A database management method for a database system connected to a plurality of storages for storing a table of data having a plurality of data items, said table data being determined according to a predetermined division rule and stored in the storages, said method comprising the steps of:

determining data to be moved from existing storages to an additional storage according to said division rule due to addition of a storage for storing said table data and copying the determined data from said existing storages to said additional storage;

previously adding copy position information in said additional storage to data as a copy source in said existing storages and, after completing the copy operation of all the data determined to be moved to said additional storage, deleting all the data as the copy source in said existing storages for rebalance operation;

accepting search, update, delete and insert requests to said table data during execution of said

rebalance operation step;

in response to the accepted search request, performing search operation over the data stored in said existing storages;

in response to the accepted update and delete requests, performing update and delete operations over the data stored in said existing storages and, when said copy position information is added to data to be updated and deleted, performing update and delete operations even over a copy destination data in said additional storage; and

in response to the accepted insert request, storing the insert object data in one of the existing storages determined according to said division rule before adding said insert object data in said additional storage and, when said additional storage is a storage destination of said insert object data according to said division rule after adding said additional storage, storing said insert object data even in said additional storage and adding storage position information of said insert object data in said additional storage in the insert object data in said existing storages.

19. A database management method as set forth in claim 18, further comprising a step of selecting and executing operations of said steps in said database management method set forth in claim 18 according to definition of said table.

20. A program read into a computer for executing steps for database management, comprising the steps of:

determining data to be moved between storages according to said division rule due to any one of addition and disconnection of a storage connected and to be connected and moving the determined data for rebalance operation;

accepting search, update, delete and insert requests over said table data during execution of said rebalance operation of said rebalance operation step;

in response to the accepted search, update and delete requests, performing search, update and delete operations over said storages; and

in response to the accepted insert request, determining a storage destination of the insert object data from said storages according to said division rule and inserting said insert object data in the determined storage.

21. A program as set forth in claim 20, further comprising steps, in response to said accepted search, update and delete requests, for parallelly executing search, update and delete operations over existing storages, and after completion of the parallel execution of the existing storages, for parallelly executing search, update and delete operations over an additional storage.

22. A program as set forth in claim 21, further comprising means, in response to the accepted insert

request, for determining a storage destination of data to be inserted from said additional storage according to said division rule and for inserting the insert object data in the determined storage.

23. A program read into a computer for executing steps for database management, comprising the steps of:

determining data to be moved from existing storages to an additional storage according to said division rule, copying the determined data from said existing storages to said additional storage, previously adding copy position information in the additional storage to copy source data in the existing storages, and after completing the copy operation of all the data determined to be moved to said additional storage, deleting all the copy source data in said existing storages;

accepting search, update, delete and insert requests for said table data during execution of rebalance operation of said rebalance operation means;

in response to the accepted search request, performing search operation over data stored in said existing storages;

in response to the accepted update and delete requests, performing update and delete operations over the data stored in said existing storages, and, when said copy position information is added to data to be updated and deleted, performing update and delete operations even over data as a copy destination in said

additional storage; and

in response to the accepted insert request, storing data to be inserted in one of said existing storages determined according to said division rule before addition thereof in said additional storage, and when said additional storage is a storage destination of said insert object data according to said division rule after addition of said additional storage, for storing said insert object data in said additional storage, and adding storage position information of said insert object data in said additional storage to the insert object data in said existing storages.

24. A program read into a computer and run over a database under control of a computer to execute steps for database management, comprising the steps of:

at the time of starting the program, confirming presence or absence of an area for storing information for identification of an additional storage for storing table data and information indicative of 'in rebalance operation' during which data is moved to said additional storage, and, in the absence of the area, securing said area.